

CLAIMS.

1. A solar collector module to focus the sun's rays onto a focal line, comprising a support structure for a trough shaped arched reflector (10), wherein the support structure comprises a plurality of form ribs (18), each form rib (18) exhibiting a parabolic lateral form (48), characterized in that the form ribs (18) are clad in an outer skin (22), that the reflector (10) consists of a pliable reflector material (38) and that the shape of the reflector (10) is impressed directly or by the interposition of a carrier for the pliable reflector material (38) onto the parabolic shaped lateral form (48).

2. A module according to claim 1, characterized in that the form ribs (18) demonstrate a sickle shape.

3. A module according to any one of the preceding claims characterized in that the parabolic lateral form (48) of the form ribs (18) is established by folding or rippling (50) of the form ribs (18).

4. A module according to any one of the preceding claims, characterized in that the opposing side of the parabolic shaped lateral form (48) demonstrates a partly circular shape.

5. A module according to any one of the preceding claims, characterized in that the form ribs (18) and the outer skin constitute an enclosed rigid box construction.

6. A module according to any one of the preceding claims, characterized in that onto the outer skin (22) lying on the parabolic lateral edges (48) a trapezoidal metal sheet (30) is attached, having grooves running lengthways along the trough shaped reflector (10) onto which the reflector material (38) is laid.

7. A module according to claim 6, characterized in that the grooves form channels which are apt to be sealed at their ends.

8. A module according to claim 6 or 7, characterized in that the trapezoidal metal sheet (30), together with the outer skin (22) is attached to the form ribs (18) by means of, for example, screws, rivets (34) or adhesive.

9. A module according to any one of claims 6 to 8, characterized in that the reflector material (38) is glued to the grooves of the trapezoidal metal sheet (30).

10. A module according to any one of the preceding claims, characterized in that the reflector material (38) consists of a metal or synthetic foil or a thin glass layer with a thickness of, for example, 1mm, wherein the foil has a reflective surface on its upper side and the glass has a reflective surface on one or both sides.

11. A module according to any one of the preceding claims, characterized in that provision is made for a receiving tube (14) along the focal line, wherein the receiving tube (14) is supported by support arms (40) and the support arms (40) are connected either to the form ribs (18) and/or to the upper surface of the reflector (16)